IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

ARDAVAN et al.

Atty. Ref.: 117-342

Serial No. 09/786,507

TC/A.U.: 2881

Filed: March 6, 2001

Examiner: B. Souw

For: APPARATUS FOR GENERATING FOCUSED ELECTROMAGNETIC

RADIATION

* * * * * *

May 17, 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

As suggested by 37 C.F.R. 1.97, the undersigned attorney brings to the attention of the Patent and Trademark Office the references listed on the attached form PTO-1449, a copy of each of which is enclosed.

The Examiner is requested to initial the attached form PTO-1449 and to return a copy of the initialed document to the undersigned as an indication that the attached references have been considered and made of record.

A check for \$180.00 is attached for the fee.

Respectfully submitted,

NIXON & VANDERHYE P.C.

05/18/2004 TBESHAH1 00000021 09786507

03 FC:1806

180.00 OP

By:

John R. Lastova

Reg. No. 33,149

JRL:at

1100 North Glebe Road, 8th Floor

Arlington, VA 22201-4714 Telephone: (703) 816-4000

Facsimile: (703) 816-4100

NFORM	MATION DISCLOSURE	ATTY. D			SERIAL NO. 09/786,507			
	CITATION OLP &	117-3						
		-APPLICA		07/700,507				
	. (MAY 1 7	2004						
•	\4		AVAN et al.					
(Use	several sheets if neosesary)	ILING E	DATE	TC/A.U.				
	TRADE	March	1 6, 2001	2881		-		
		U.	S. PATENT DOCUMENTS					
AMINER IITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS		DATE	
		FOR	EIGN PATENT DOCUMENTS			704110	LATION	
	DOCUMENT	DATE	COUNTRY	CLASS	SUBCLASS	YES	LATION NO	
$\overline{}$								
					<u> </u>		ļ	
İ								
Ì								
	OTHER DOCL	JMENTS (inc	cluding Author, Title, Date, Pert	inent pages, e	tc.)	<u> </u>	I	
	Bolotovskii and Ginzbu	rg, "The Vavi	lov-Cerenkov Effect and the Doppler	Effect in the Mo	otion of Sour	ces with		
	Superluminal Velocity i	n Vacuum"; S	Soviet Physics Uspekhi, Vol. 15, No. 2	2, September - O	ctober 1972.			
			olarizes Opinions", Physics World, A		e 9		······	
			Pulsar"; The Economist, 19 August 20					
	N. Appleyard and B. Ap	pleby, "Warp	Speed", New Scientist, April 2001, p	pages 28 to 31.				
	E. Cartlidge, "Futuristic	Device Defie	s Law", Physics World, February 200	01, page 6.				
	E. Cartlidge, "Money Sp	E. Cartlidge, "Money Spinner or Loopy Idea?", Science, September 2003, page 1463.A. Ardavan, H. Ardavan, J. Singleton "Response", Letters, Science, 16 January 2004, pages 310 and 311.						
	A. Ardavan, H. Ardavan	, J. Singleton	"Response", Letters, Science, 16 Jan	uary 2004, pages	310 and 31	l.		
	31.	Relativistic P	ulsar Wind", Publications of the Astro	onomical Society	y of Australia	i, 1998, 1	5, 328 t	
		n "Method of	Handling the Divergences in the Rad	iation Theory of	Sources The	t Moye E	actor	
-	Than Their Waves," ww	w.phv.bris.ac	.uk/research/theory/hannay2.pdf.	and i incory of	Douices Illa	r 1410 AC L	asici	
	J. Hannay, "Faster Than	The Speed of	Light," www.phy.bris.ac.uk/research	theory/hannay1	.pdf.			
	S. Rosenbaum, "Divergi	ng Opinions"	; Letter, Physics World, October 2000	0, page 20.		-		
	A. Hewish, "Comment I	on "Generation	on of Focused, Nonspherically Decay		ectromagneti	c Radiati	on";	
	Physical Review E, Vol.							
	J. Hannay, "Comment II	on "Generation	on of Focused, Nonspherically Decay	ing Pulses of Ele	ectromagneti	c Radiati	on";	
			ugust 2000, page 3008 and 3009.					
	Padiation": Physical Pa	comments on Vol. 4	"Generation of Focused, Nonspherica	ally Decaying Pu	lses of Electi	omagnet	ic	
-+	I Hannay "Comment or	"Method of	52, No. 2, August 2000, page 3010 to Handling the Divergences in the Rad	3013.	Carrage The	4 M E		
l	Than Their Waves". Jou	rnal Mathema	itical Physics, Vol. 42, No. 8, August	2001 nage 3073	Sources Ina Lto 3074	t Move F	aster	
	J. Hannay, "Bounds on I	Fields from Fa	ast Rotating Sources, and Others", Pro	eedings: Mathe	matical Phy	sical and		
	Engineering Sciences. V	ol. 452, No. 1	1953, Oct. 8, 1996, page 2351 to 2354		mancai, i ily	oicai aiiu		
			ics World, November 1990, page 39 to					
	Uehara and Kikuchi, "G	eneration of N	learly Diffraction-Free Laser Beams"	; Applied Physic	s, B46, 125	to 129 (19	989).	
T	J. Lu, "Experimental Ve	rification of N	Iondiffracting X Waves", IEEE Trans	actions on Ultra	sonics, Ferro	electrics,	and	
	Frequency Control, Vol.	39, No. 3, Ma	ay 1992, page 441.			·		

*Examiner	Date Considered	
	·	

Frequency Spectrum of Focused Broadband Pulses of Electromagnetic Radiation Generated by Polarization Currents with

Superluminally Rotating Distribution Patterns, Ardavan et al., Vol. 20, No. 11, November 2003, J. Opt. Soc. Am.

Spectrial and Polarization Characteristics of the Nonspherically Decaying Radiation Gnerated by Polarization Currents with Superluminally Rotating Distribution Patterns, (proof copy), Ardavan et al., Vol. 21, No. 5, J. Opt. Soc. Am.

Experimental Demonstration of a new Radiation Mechanism: Emission by an Oscillating, Accelerated, Superluminal

Polarization Current, A. Ardavan et al.

Lasers, Siegman, Oxford University Press, 1986, pages 669-671.

*Examiner	Date Considered	